

Work Order ID 81842

81842

Page 1

March 19-12 4:22:37 PM

Item ID: D205-634-141

Accept

N900040100

Setup Start ***NS1***

Revision ID:

Item Name: Replacement Skidtube

Stop ***NS2***

Start Date: 19/03/2012 Start Qty: 1.00

1

Cust Item ID:

Required Date: 02/04/2012 Req'd Qty: 1.00

1

Customer:

Reference:

Approvals: Process Plan: MLJ

Date: 12/03/20 Tooling:

Date:

Run Start ***NR1***

QC:

Date:

SPC (Y/N):

Date:

Stop ***NR2***

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
--------------------------------	--------------------------	----------------------	---------	--------	--------------	---------------	---------------	------------------	----------------

Draw Nbr

Revision Nbr

D2580-047

(DEO) revE

100

0.00

100

DOCUMENT CONTROL

DC

Memo

0.00

Document Control

Photocopy D205-634 bluefile & type labels per PPP D205-634-141 CHG003

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

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Reference:

Approvals:

Process Plan:

Date:

Tooling:

Date:

Run Start ***NR1***

QC:

Date:

SPC (Y/N):

Date:

Stop ***NR2***Sequence ID/
Work Center IDOperation
DescriptionSet Up/
Run Hours

Tool ID

Tool #

Plan
CodeAccept
QtyReject
QtyReject
NumberInsp.
Stamp

110

0.00

110

Skidtubes

Skidtubes

Memo

0.00

1- Inspect mat'l D2500-1-190 for damage

2-Cut D2500-1-190 per Dwg D2580 if necessary Debur ends

3-Drill pilot holes using DT8149, drill #30 hole (3.630 REF) using DT8149 and SPOT drill #30 (5.338 & 5.985 REF) using DT8149. Open holes to finished size except for (4) AFT spot drilled holes as per dwg D2580 sheet 7.

4-Drill pilot holes using drill jig DT 8149 and open holes to finish size

5-Acid etch and Alodine tube per QSI 005 4.1

6- Install web as per dwg using sikaflex
A/R Sikaflex Batch #: M120813

12-03-26

B/P/G 12-3-27

120

0.00

120

BENDING MACHINE - SKIDTUBES

CNC Bend 1

Memo

0.00

CNC Delta 100 Bender

1-Bend as per program D2580.C on CNC Bender and Folio FT 16

2-Cut tubes as per Dwg. D2580

3- Scribe batch# in aft end of tube

>

CF 12-3-28

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

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Date:

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Date:

Run Start ***NR1***

QC:

Date:

SPC (Y/N):

Date:

Stop ***NR2***

Sequence ID/
Work Center ID

Operation
Description

Set Up/
Run Hours

Tool ID

Tool #

Plan
Code

Accept
Qty

Reject
Qty

Reject
Number

Insp.
Stamp

130

0.00

130

Skidtubes

Skidtubes

Memo

0.00

1-Deburr ends after cutting and remove bending marks. Prepare tube for welding
D2576-3 step remove alodine as required.

2-Locating from most fwd saddle hole, drill most fwd wearplate hole using
DT9793 (10.832 REF) as per dwg D2580 sheet 7.

3-Open run-on wearplate holes to finished size at locations (5.338/ 5.985/
10.832 REF) as per dwg D2580 sheet 7.

4-Drill pilot holes for aft cap using DT8215, Open to finished size.

JB / 216.12.3.30

140

QC5- Inspect part completeness to step on W/O

0.00

140

QC

Memo

0.00

Quality Control

1 0 8E12/03/30

W/O:		WORK ORDER CHANGES					
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1

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Approvals: Process Plan:

Date:

Tooling:

Date:

Run Start ***NR1***

QC:

Date:

SPC (Y/N):

Date:

Stop ***NR2***

Sequence ID/
Work Center ID

Operation
Description

Set Up/
Run Hours

Tool ID Tool #

Plan
Code

Accept
Qty

Reject
Qty

Reject
Number

Insp.
Stamp

150

0.00

150

Skidtubes

Skidtubes

Memo

0.00

Skidtubes

1-Weld step D2576 as per Dwg. D2580 and QSI 004
A/R Aluminum Rod *m/20/04 BE 12/04/02*

2-Touch up alodine on run on wearplate holes prior to swaging

3- Insert D4202-1 spacer, swage as per QSI002 and trim/ grind flush per QSI002 and as per dwg *3/16/12-4-2*

160

QC10- Inspect visual per QSI004- ground welds

0.00

160

QC

Memo

0.00

Quality Control

170

QC5- Inspect part completeness to step on W/O

0.00

170

QC

Memo

0.00

Quality Control

W/O:		WORK ORDER CHANGES					
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Cust Item ID:

Required Date: 02/04/2012 Req'd Qty: 1.00 ***1***

Customer:

Reference:

Approvals: Process Plan:

Date:

Tooling:

Date:

Run Start ***NR1***

QC:

Date:

SPC (Y/N):

Date:

Stop ***NR2***

Sequence ID/
Work Center ID

Operation
Description

Set Up/
Run Hours

Tool ID

Tool #

Plan
Code

Accept
Qty

Reject
Qty

Reject
Number

Insp.
Stamp

180

Pressure Wash per QSI005 4.3

0.00

180

HandFinish

Memo

0.00

Hand Finishing

And realodine tube as per QSI 005

1 X 180 M 12/04/09

190

White Gloss(Ref:4.3.5.1) per QSI005 4.3-Alum

0.00

190

Powdercoat

Memo

0.00

Powder Coating

START TIME: 9h10
OVEN TEMPERATURE: 320°F
FINISH TIME: 9h40

M120222

1 X 190 (QP) 12/04/09

200

QC3- Inspect Part Finish

0.00

200

QC

Memo

0.00

Quality Control

1 X 200 11/04/13

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Page 6

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Process Plan:

Date:

Tooling:

Date:

Run Start ***NR1***

QC:

Date:

SPC (Y/N):

Date:

Stop ***NR2***

Sequence ID/
Work Center ID

Operation
Description

Set Up/
Run Hours

Tool ID

Tool #

Plan
Code

Accept
Qty

Reject
Qty

Reject
Number

Insp.
Stamp

210

Assemble as per dwg
HandFinishing

0.00

210

HandFinish

Memo

0.00

Hand Finishing

1-Install inserts & wearplates as per Dwg. D2580. Use a drop of Sikaflex on insert holes before installing wearplates

A/R Sikaflex-291 11/12/03

Sikaflex expire date: 12/08

2-Coat D2594-3 O' rings with Petroleum Jelly and install on D2594

3- Install aft cap as per dwg

4- Wing walk as per dwg Batch# 11/12/11

1 6 11/12/11

220

QC5- Inspect part completeness to step on W/O

0.00

220

QC

Memo

0.00

Quality Control

Inspect Aft Cap, Fwd Step and Wing Walk of work to Current Step Inspect for Foreign objects per QSI 024

8/12/11

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Page 7

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Required Date: 02/04/2012 Req'd Qty: 1.00

1

Customer:

Reference:

Approvals:

Process Plan:

Date:

Tooling:

Date:

Run Start ***NR1***

QC:

Date:

SPC (Y/N):

Date:

Stop ***NR2***

Sequence ID/
Work Center ID

Operation
Description

Set Up/
Run Hours

Tool ID

Tool #

Plan
Code

Accept
Qty

Reject
Qty

Reject
Number

Insp.
Stamp

230

230

Packaging

Packaging

0.00

Memo

0.00

Identify and pack for shipping as per PPPD205-634-141

Location:

PPP Rev:

Packaging

240

240

QC

QC21- Final Inspection - Work Order Release

0.00

Memo

0.00

Quality Control

SP

12-04-11

PPP 81838

MCJ 12/04/10

12-04-18

W/O:		WORK ORDER CHANGES					
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Picklist Print

March-19-12 4:22:41 PM

Page 1

Work Order ID: 81842

81842

Parent Item: D205-634-141

D205-634-141

Parent Item Name: Replacement Skidtube

Start Date: 19/03/2012

Required Date: 02/04/2012

Start Qty: 1.00

Required Qty: 1.00

Comments: IPP RevA 11.09.14' new issue EC verified by:DD
12.01.23 AS PER ECN11-684 DD VERF:EC

IPP REV:B

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status
---------------------------------	------------------------	---------------	-------------	---------------------	------------------	-----------------	--------------------	----------------	-------------	--------------	---------------	----------------	--------

D2500-1-190

Manufactured

No

110

Each

112.0000

1

1

D2500-1-190

Ext'n -1' Beam Tube 4"

**

① 2/17 12-03-26

Location

Loc Qty

Loc Code

HALL

112

74777

32

80061

80

D2596

Manufactured

No

110

Each

3.0000

1

1

D2596

Web, 205 Skidtube

**

Location

Loc Qty

Loc Code

LG

3

80185

2

80820

1

D4202-1

Manufactured

No

150

Each

238.0000

24

24

D4202-1

Spacer

**

Location

Loc Qty

Loc Code

LG

5

77727

5

LG002

233

78806

233

24 2/17 12-3-30

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

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March-19-12 4:22:41 PM

Page 2

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Parent Item Name: Replacement Skidtube

81842

D205-634-141

Start Date: 19/03/2012

Required Date: 02/04/2012

Start Qty: 1.00

Required Qty: 1.00

AN4-45A

Purchased

No

210

Each

64.0000

8

8

AN4-45A

Bolt

**

11121162 (x8) ul 12/04/13

Location

Loc Qty

Loc Code

ST350A

64

118926

64

D2570

Manufactured

No

210

Each

327.0000

16

16

D2570

Bushing

**

ul 12/04/13

Location

Loc Qty

Loc Code

ST011

327

72960

41

78586

19

78587

67

79493

200

D4406-041

Manufactured

No

210

Each

4.0000

1

1

D4406-041

Fwd Wearplate Assembly

**

1380756 (x1) ul 12/04/13

Location

Loc Qty

Loc Code

Return2012

2

74147

2

WA

2

80794

2

D4406-043

Manufactured

No

210

Each

4.0000

1

1

D4406-043

Aft Wearplate Assembly

**

1380757 (x1) ul 12/04/13

Location

Loc Qty

Loc Code

Return2012

2

74148

2

WA

2

80795

2

March-19-12 4:22:41 PM

Shop Packet Print

Page 2

W/O:		WORK ORDER CHANGES					
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Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

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March-19-12 4:22:41 PM

Page 3

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Parent Item: D205-634-141

Parent Item Name: Replacement Skidtube

81842

D205-634-141

Start Date: 19/03/2012

Required Date: 02/04/2012

Start Qty: 1.00

Required Qty: 1.00

MS21042-4

Purchased

No

210

Each

1,248.000

8

8

MS21042-4

USE MS21042L4

**

12/04/12

Location

Loc Qty

Loc Code

ST299

1248

100743

9

119124

1000

5389

66

5461

3

6844

19

7690

24

8182

115

9063

8

9229

4

XB

D2576-3

Manufactured

No

150

Each

46.0000

1

1

D2576-3

Step (maching detail)

**

12/04/12

Location

Loc Qty

Loc Code

LG

46

70883

1

74136

45

D2855

Manufactured

No

210

Each

50.0000

1

1

D2855

Cap

**

12/04/12

Location

Loc Qty

Loc Code

FP002

50

65519

2

73347

30

75074

18

XI

W/O:		WORK ORDER CHANGES					
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Page 4

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D205-634-141

Parent Item Name: Replacement Skidtube

Start Date: 19/03/2012

Required Date: 02/04/2012

Start Qty: 1.00

Required Qty: 1.00

AN3-5A Purchased No

AN3-5A

Bolt

210 Each 1,082.000 2 2

**

del 12/04/13

Location

Loc Qty

Loc Code

ST350

1082

115371

46

117423

124

118626

212

119355

200

120187

500

X2

AN960JD10L NAS1149D0332J Purchased No

***AN960.ID10I *** *

Washer

D2594-3 Manufactured No

210 Each 0.0000 2 2

**

1120644 (x2) del 12/04/13

D2594-3

O-Ring, 205 Skidtube

210 Each 2,834.000 8 8

**

del 12/04/13

Location

Loc Qty

Loc Code

FP001

2834

65518

41

79496

984

79573

50

79755

1759

X8

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D205-634-141

Parent Item Name: Replacement Skidtube

Start Date: 19/03/2012

Required Date: 02/04/2012

Start Qty: 1.00

Required Qty: 1.00

D2594-1

Manufactured No

210

Each

411.0000

8

8

D2594-1

Plug, 205 Skidtube

u 12/04/13

Location

Loc Qty

Loc Code

FP001

150

73401

30

74442

34

74869

24

77035

62

FP-A

261

73401

0

78590

261

18

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

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LIST OF MATERIALS					
ITEM	QTY	QTY	QTY	PART NUMBER	DESCRIPTION
-	-041	-045	-047		
1	X			D2580-041	SKIDTUBE ASSEMBLY
2		X		D2580-045	SKIDTUBE ASSEMBLY
3			X	D2580-047	SKIDTUBE ASSEMBLY
4	1	1	1	D2500-1-190	EXTRUSION
5			16	D2570	BUSHING
6	1	1	1	D2576-3	STEP
7	20	24	25	D2579	SPACER
8	16	16	8	D2594-1	PLUG
9	16	16	8	D2594-3	O-RING
10	1	1	1	D2596	205 WEB
11	1	1	1	D2855	AFT CAP
12	1	1		D3564-5	WEARSHOE
13	1	1		D3564-9	WEARSHOE
14	1	1		D3564-11	WEARSHOE
15	1	1		D3564-13	WEARSHOE
16	2	2		D3566-1	GASKET
17	1	1		D3566-5	GASKET
18	1	1		D3566-13	GASKET
19			1	D4406-041	WEARPLATE ASSEMBLY
20			1	D4406-043	WEARPLATE ASSEMBLY
21	50	50		ALS7-1032-130 or AKS7-1032-130 or AKS4-1032-130 or AELS-1032-130	INSERT
22	50	50		AN3C4A	BOLT
23	2	2	2	AN3-5A	BOLT
24			8	AN4-45A	BOLT
25	50	50		NAS1149C0332R	WASHER (AN960C10L)
26	2	2	2	NAS1149D0332J	WASHER (AN960JD10L)
27			8	MS21042-4	NUT (OR MS21042L4)

GENERAL NOTES:

- MATERIAL: N/A
- FINISH: CHEMICAL CONVERSION PER DART QSI 005 4.1 PRIOR TO INSERTING D2596 WEB.
POWDER COAT ASSEMBLY (-041/-047) GLOSS WHITE (REF 4.3.5.1) PER DART QSI 005 4.3
POWDER COAT ASSEMBLY (-045) GREEN SANDEX (REF 4.3.5.8) PER DART QSI 005 4.3
BLACK ANTI-SKID PAINT AS INDICATED PER DART QSI 005 4.4.
- TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED.
- UNITS: INCHES UNLESS OTHERWISE NOTED.
- BREAK SHARP EDGES: 0.005 TO 0.010 MAX.
- IDENTIFICATION: NONE
- WEIGHT: D2580-041 = 34.5 lbs
D2580-045 = 34.5 lbs
D2580-047 = 37.7 lbs
- WELDING PER DART QSI 004.
- INSERT D2596 WEB TO LOCATION SHOWN OFF AFT END OF SKIDTUBE AND BOND WEB INTO OUTER TUBE WITH NON-STRUCTURAL SIKAFLEX-241 ADHESIVE PER DART QSI 015 BEFORE BENDING. ENSURE HOLES LINE-UP.
- BEND AS A SMOOTH RADIUS STARTING WITH A MAXIMUM CENTERLINE RADIUS OF 60 AND ENDING WITH A MINIMUM RADIUS OF 30. A MAXIMUM REDUCTION OF 0.200 IN DIAMETER IS ALLOWABLE IN THE BENT PORTION OF THE TUBE.
- USE DART DRILL TEMPLATE DT8217 & DT8937 ONLY FOR D2580-041/-045 TO LOCATE AND DRILL Ø0.297 HOLES FOR WEARSHOE INSERTS. INSTALL ALS7-1032-130 PER SECTIONS B-B AND F-F (50 PLACES) AFTER FINISH. INSTALL AN3C4A BOLTS AND NAS1149C0332R WASHERS WITH SIKAFLEX-241-291.
- INSERT D2594-1 PLUG C/W D2594-3 O-RING IN HOLES MARKED 'P' (BOTH SIDES OF TUBE) AFTER FINISH (16 PLACES FOR D2580-041/-045 AND 8 PLACES FOR D2580-047)
- IT IS ACCEPTABLE TO GRIND A RELIEF IN THE D2855 AFT CAP TO PREVENT INTERFERENCE WITH THE SPACER AT THIS LOCATION

DEO ATTACHED

RELEASED
2011-08-29

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WITHOUT NOTICE
WORK ORDER

NO. 81842 MCT
12/03/20

E	ADD D2580-047 (ZN C4-7) AND D2580-7 (ZN B3-B); INCLUDED DEO D2580-D-1; REFORMATTED DRAWING TO CURRENT STANDARDS; DT8217 & DT8937 WAS TD2577-205 (ZN C4-1)	RF	11.06.21
D	CHANGE TO SS WEARPLATES AND GASKETS, INCLUDE DEO 9124/ 9183	PH	07.04.05
C	REDRAWN, INCLUDED DEO 9094/ 9097	CP	98.08.26
B	AS MANUFACTURED	DS	96.12.02
A	NEW ISSUE	DS	96.09.16
REV.	DESCRIPTION	BY	DATE
DESIGN	RF	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA	
DRAWN	RF		
CHECKED	RF	DRAWING NO.	REV. E
MFG. APPR.	RF	D2580	SHEET 1 OF 8
APPROVED	RF	TITLE	SCALE
DE APPR.	RF	205 SKIDTUBE ASSEMBLY	NTS
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W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

0.5

1.5

1.5

B4-2

12

1.5

1.5

82.2

WELD AS PER DETAIL C

BLACK ANTI-SKID TOP OF STEP TO 0.5 ABOVE BOTTOM EDGE

D2580-1 BENT TUBE

B7-2

REFER TO DETAIL A

P

B

P

P

P

P

P

P

P

D3566-1

D3566-5

D3566-1

D3566-13

D3564-11

D3564-5

D3564-9

D3564-13

AN3C4A BOLT (1)

NAS1149C0332R WASHER (1)

50 PL

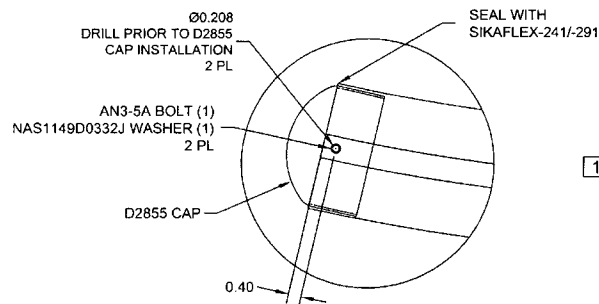
D2580-041 ASSEMBLY DETAIL

DEO ATTACHED

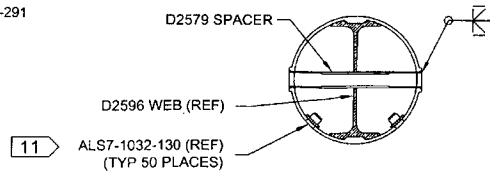
RELEASE
2011-08-29

2011-08-29

DETAIL A C7-2
SCALE 5X



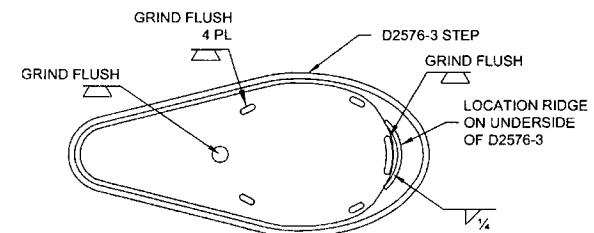
D5-2
SECTION B-B
SCALE 5X



**AFTER DRILLING AND BENDING ASSEMBLY
PERFORM THE FOLLOWING FOR Ø0.508 HOLES ONLY:**

- 1. CHAMFER HOLE 0.050 X 45°**
- 2. INSERT D2579 SPACER (20 PLACES)**
- 3. WELD INTO PLACE AND GRIND FLUSH**
- 4. C'BORE D2579 SPACER TO Ø0.437 X 1.00 DEEP**

DETAIL C D3-2
SCALE 5X



DESIGN	<i>4</i>	DART AEROSPACE LTD	
DRAWN	RF	HAWKESSBUR, ONTARIO, CANADA	
CHECKED	<i>10</i>	DRAWING NO.	REV. E
MFG APPR.	<i>10</i>	D2580	SHEET 2 OF 8
APPROVED	<i>10</i>	TITLE	SCALE
DE APPR.	<i>10</i>	205 SKIDTUBE ASSEMBLY	NTS
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DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

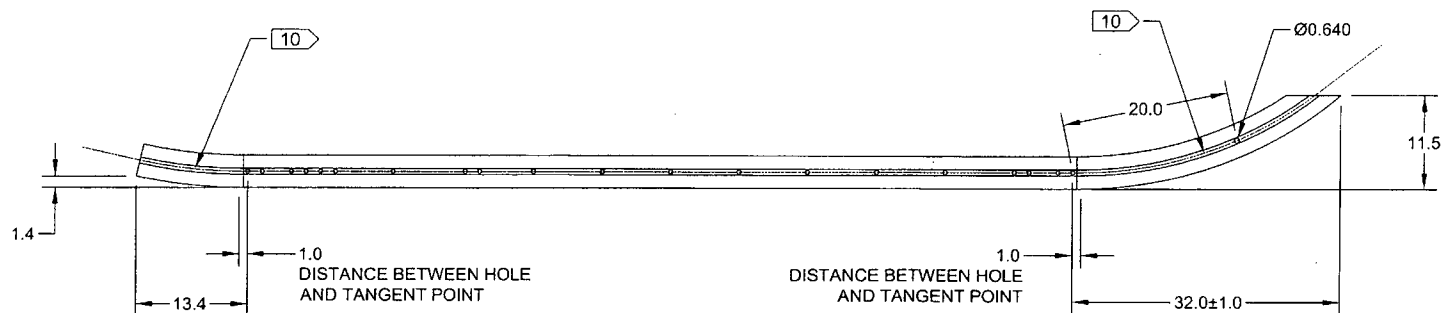
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Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

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21842



D2580-1 BENT TUBE
(MAKE FROM D2580-101 TUBE)

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DESIGN	RF	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA	
DRAWN	RF	DRAWING NO.	REV. E
CHECKED	RF	D2580	SHEET 3 OF 8
MFG. APPR.	RF	TITLE	SCALE
APPROVED	RF	205 SKIDTUBE ASSEMBLY	NTS
DE APPR.	RF	DATE	11.06.21
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DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

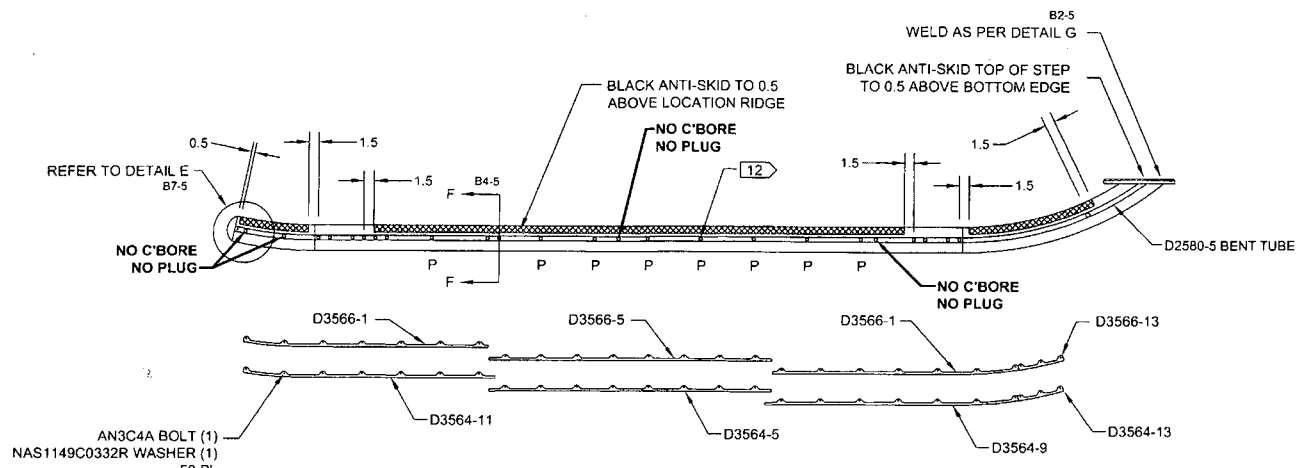
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Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

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			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

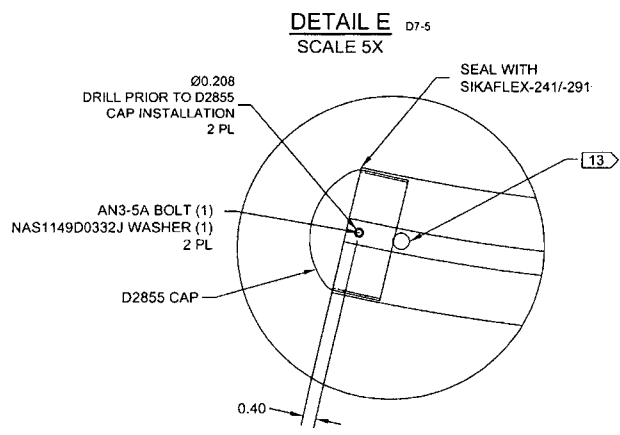
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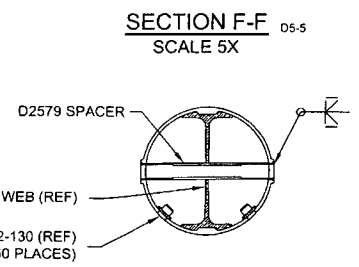


D2580-045 ASSEMBLY DETAIL

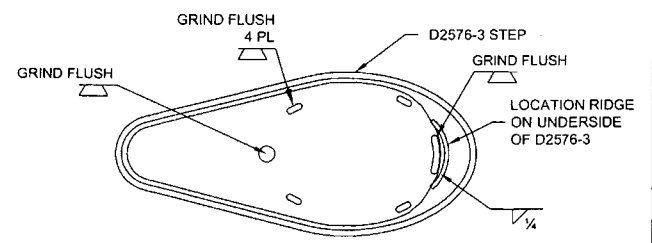
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2011-08-29
ANT



DETAIL E
SCALE 5X



SECTION F-F
SCALE 5X



DETAIL G
SCALE 5X

- AFTER DRILLING AND BENDING ASSEMBLY PERFORM THE FOLLOWING FOR Ø0.508 HOLES ONLY:
1. CHAMFER HOLE 0.050 X 45°
 2. INSERT D2579 SPACER (24 PLACES)
 3. WELD INTO PLACE AND GRIND FLUSH
 4. C'BORE D2579 SPACER TO Ø0.437 X 1.00 DEEP

DESIGN	#	DART AEROSPACE LTD	
DRAWN	RF	HAWKESBURY, ONTARIO, CANADA	
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MFG. APPR.	AP	TITLE	SCALE
APPROVED	AP	205 SKIDTUBE ASSEMBLY	NTS
DE APPR.		DATE 11.06.21	

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DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

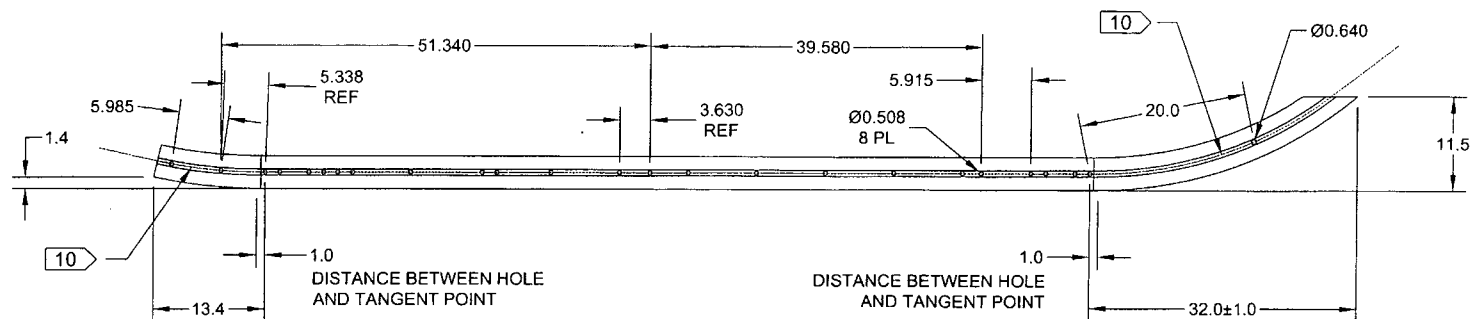
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Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

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D2580-5 BENT TUBE
(MAKE FROM D2580-101 TUBE)

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MFG. APPR.	10	D2580	SHEET 5 OF 8
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DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

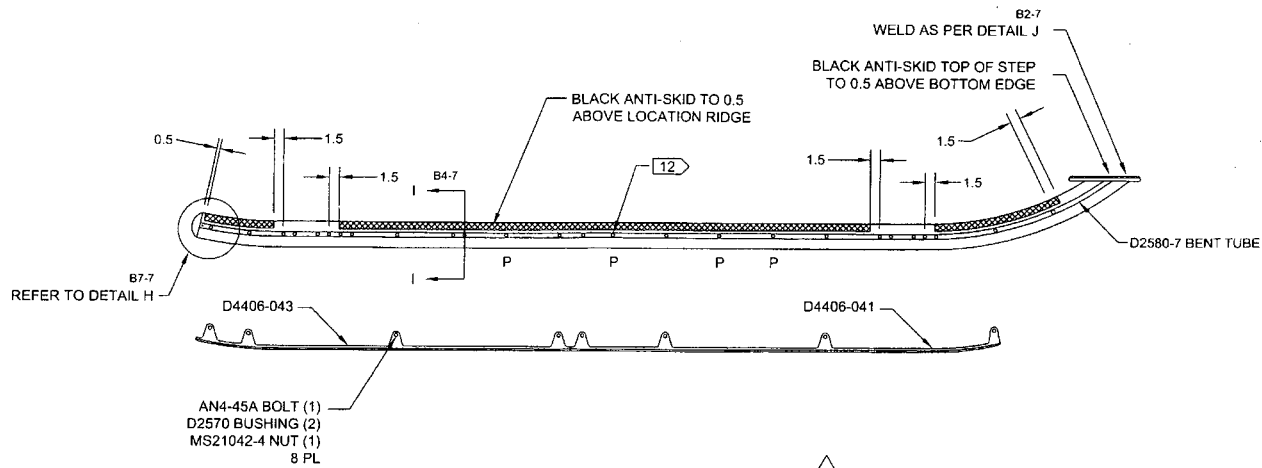
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Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

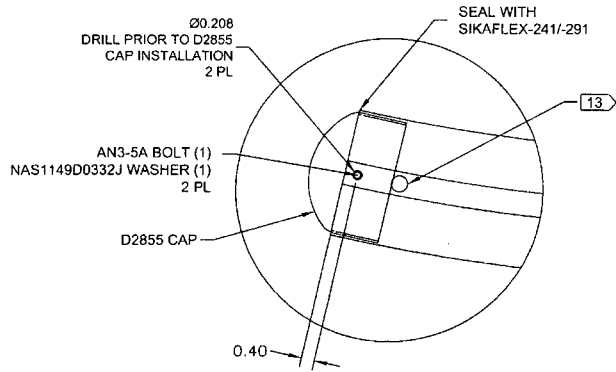
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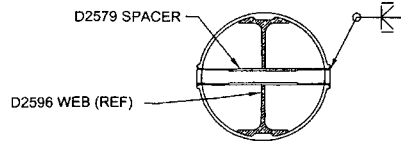


D2580-047 ASSEMBLY DETAIL E

DETAIL H C6-7
SCALE 5X

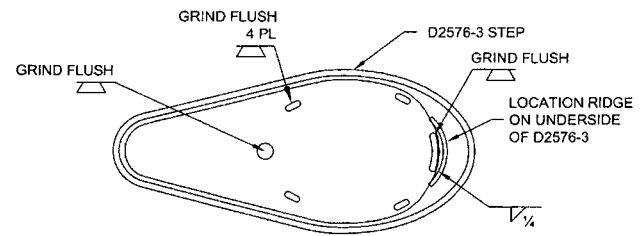


SECTION I-I D5-7
SCALE 5X



- AFTER DRILLING AND BENDING ASSEMBLY
PERFORM THE FOLLOWING FOR Ø0.508 HOLES ONLY:
1. CHAMFER HOLE 0.050 X 45°
 2. INSERT D2579 SPACER (25 PLACES)
 3. WELD INTO PLACE AND GRIND FLUSH
 4. C'BORE D2579 SPACER TO Ø0.437 X 1.00 DEEP

DETAIL J D3-7
SCALE 5X



DESIGN	4	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA	
DRAWN	RF	DRAWING NO.	REV. E
CHECKED	10	D2580	SHEET 6 OF 8
MFG. APPR.	10	TITLE	SCALE
APPROVED	10	205 SKIDTUBE ASSEMBLY	NTS
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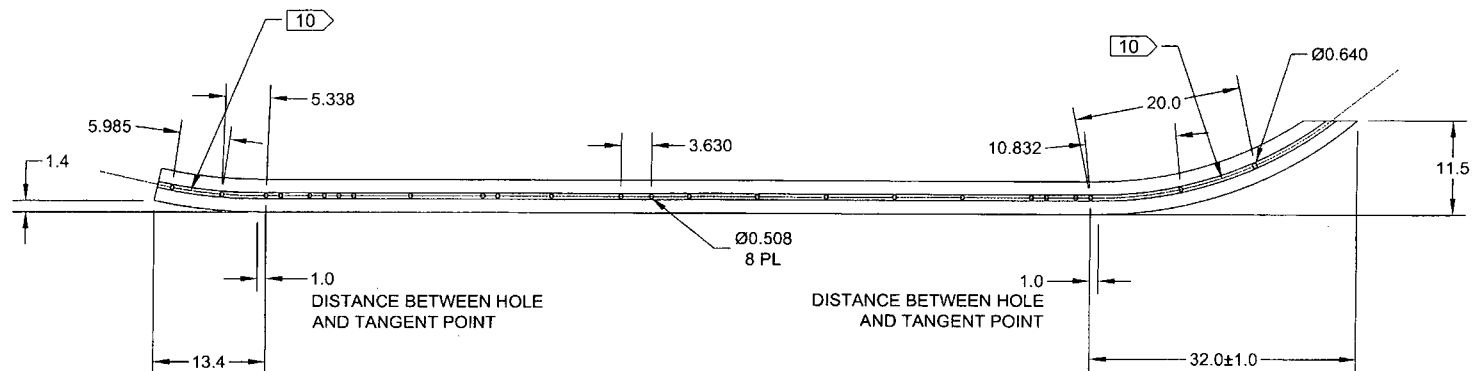
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Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
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D2580-7 BENT TUBE
(MAKE FROM D2580-101 TUBE)



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CHECKED	RF	DRAWING NO.	REV. E
MFG. APPR.	RF	D2580	SHEET 7 OF 8
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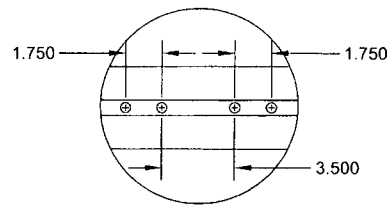
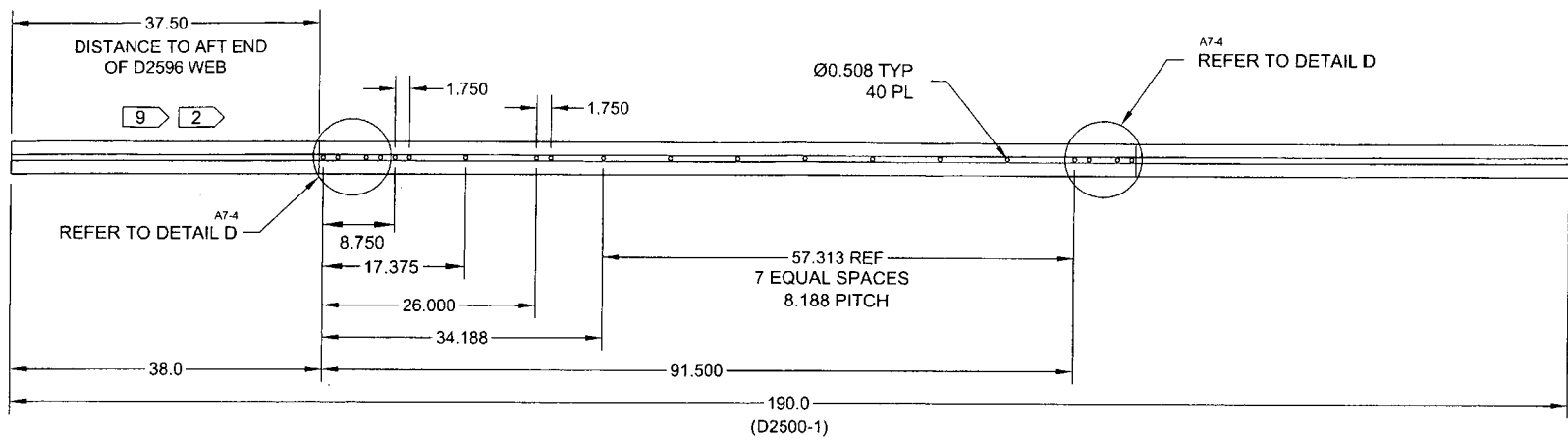
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Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
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			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

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DETAIL D D3-4
C7-4
SCALE 5X

D2580-101 TUBE

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MFG. APPR.	10	D2580	SHEET 8 OF 8
APPROVED	10	TITLE	SCALE
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			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

W/O:		WORK ORDER CHANGES					
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			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

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